

TABLE 23-II-E-1-ALLOWABLE SPANS AND LOADS FOR WOOD STRUCTURAL PANEL SHEATHING AND SINGLE-FLOOR GRADES CON- TINUOUS OVER TWO OR MORE SPANS WITH STRENGTH AXIS PERPENDICULAR TO SUP- PORTS^{1, 2}

SHEATHING GRADES		ROOF ³				FLOOR ⁴
Panel Span Rating	Panel Thickness (inches)	Maximum Span (inches)		Load ⁵ (pounds per square foot)		Maximum Span (inches)
Roof/Floor Span		With Edge Support ⁶	Without Edge Support ⁶	Total Load	Live Load	25.4 for mm
12/0	5/16	12	12	40	30	0
16/0	5/16, 3/8	16	16	40	30	0
20/0	5/16, 3/8	20	20	40	30	0
24/0	3/8, 7/16, 1/2	24	20 ⁷	40	30	0
24/16	7/16, 1/2	24	24	50	40	16
32/16	15/32, 1/2, 5/8	32	28	40	30	16 ⁸
40/20	19/32, 5/8, 3/4, 7/8	40	32	40	30	20 ^{8,9}
48/24	23/32, 3/4, 7/8	48	36	45	35	24
54/32	7/8, 1	54	40	45	35	32
60/48	7/8, 1, 1 1/8	60	48	45	35	48
SINGLE FLOOR GRADES		ROOF ³				FLOOR ⁴
Panel Span Rating	Panel Thickness (inches)	Maximum Span (inches)		Load ⁵ (pounds per square foot)		Maximum Span (inches)
		With Edge Support ⁶	Without Edge Support ⁶	Total Load	Live Load	25.4 for mm
16 oc	1/2, 19/32, 5/8	24	24	50	40	16 ⁸
20 oc	19/32, 5/8, 3/4	32	32	40	30	20 ^{8,9}
24 oc	23/32, 3/4	48	36	35	25	24
32 oc	7/8, 1	48	40	50	40	32
48 oc	13/32, 11/8	60	48	50	50	48

¹Applies to panels 24 inches or wider.

²Floor and roof sheathing conforming with this table shall be deemed to meet the design criteria of Section 2312.

³Uniform load deflection limitations 1/180 of span under live load plus dead load, 1/240 under live load only.

⁴Panel edges shall have approved tongue-and-groove joints or shall be supported with blocking unless 1/4-inch minimum thickness underlayment or 1 1/2 inches of approved cellular or lightweight concrete is placed over the subfloor, or finish floor is 3/4-inch wood strip. Allowable uniform load based on deflection of 1/360 of span is 100 pounds per square foot (psf) except the span rating of 48 inches on center is based on a total load of 65 psf

⁵Allowable load at maximum span.

⁶Tongue-and-groove edges, panel edge clips [one midway between each support, except two equally spaced between supports 48 inches on center], lumber blocking, or other. Only lumber blocking shall satisfy blocked diaphragms requirements.

⁷For 1/2-inch panel, maximum span shall be 24 inches.

⁸May be 24 inches on center where 3/4-inch wood strip flooring is installed at right angles to joist.

⁹May be 24 inches on center for floors where 1 1/2 inches of cellular or lightweight concrete is applied over the panels.

ALLOWABLE SHEATHING SPAN

Sheathing ¹		Maximum Spans	
		ROOF	FLOOR
1" Thick Nominal	Solid	16"	not applicable
	Spaced ²	16"	not applicable
2" Thick Nominal	Supporting Ceiling	5'-6" ³	4'-0"
	No Ceiling	6'-6" ³	4'-0"

FOOTNOTES:

¹ Span of sheathing boards placed diagonally across rafters or joists shall be measured along the longitudinal axis of the plank.

² Shall be continuous over three or more supports and no board shall be less than six feet long.

³ Douglas Fir Larch No. 3 or better permitted.